

Illustration shows the orange and black plastic box in which Round Handle Needle Files, Die Sinkers Files and Bench Filing Machine Files are supplied when ordered in assorted sets. Note how base of box becomes a convenient file rack when top is removed.

PROVIDENCE, R. I.

U. S. A.

SWISS PATTERN FILES BY

NICHOLSON

NICHOLSON

EXTRA - FINE

SWISS PATTERN

World's Leading Gile Manufacturer



NICHOLSON X. F. SWISS PATTERN FILES

• Nicholson X.F. Swiss Pattern Files are made to more exacting measurements than American Pattern Files. Although some cross sections of both types are similar, the shapes differ. The points of X.F. Swiss Pattern Files are smaller and the tapered files have longer tapers than those of American Pattern Files. Furthermore, Nicholson X.F. Swiss Pattern Files are made in much finer cuts. These cuts vary from No. 00, which is the coarsest to No. 6. the finest.

Our X.F. Swiss Pattern Files are primarily finishing tools, used for removing burrs left over from previous finishing operations, rounding out slots and cleaning out square corners, smoothing up small parts and in fact, doing the final finishing on all sorts of delicate and intricate pieces.

The smaller points of these files make them useful for enlarging small holes and shaping and finishing very narrow grooves, slots, notches and key ways.

Those who need X.F. Swiss Pattern Files include tool and die makers, delicate instrument parts finishers, jewelers, model makers and home craftsmen. In short, everyone who does super fine precision filing will have many uses for X.F. Files.

Special care is required in the manufacture of X.F. Swiss Pattern Files. They are made in a separate division of our Providence Factory by a staff specially trained for their work. Anyone who buys X.F. Swiss Pattern Files is assured of highest quality under Nicholson's guarantee of twelve perfect files in every dozen.

NICHOLSON FILE COMPANY, PROVIDENCE, R. I., U. S. A.

ACTUAL COARSENESS OF 6-INCH HAND CUT FILES—CUTS Nos. 00 TO 6

SWISS PATTERN

(1) HAND

Hand Files are equaling or parallel in width and tapering in thickness.

Double cut on the two flat sides and single cut on one edge for files in cuts No. 00 to No. 2. For cuts No. 3 to No. 6 the two edges are safe.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

(2) PILLAR

Pillar Files are similar in shape to Hand Files but about two-thirds as

wide. Double cut on the two flat sides only, the edges being safe.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

(3) PILLAR NARROW

Pillar Narrow Files are, as their name indicates, the same as Pillar Files,

but narrower for the same length. Double cut on the two flat sides only, the edges being safe.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

4) PILLAR EXTRA NARROW

Pillar Extra Narrow Files are the same as Pillar or Pillar Narrow

Files but narrower than the Pillar Narrow for their length. Cut on the two flat sides only, the edges being safe.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

(5) EQUALING

Equaling Files are equaling or parallel in width and thickness through-

out their length. Double cut on the two flat sides and single cut on both edges.

Made in lengths of 3, 4, 6 and 8 inches and in cuts Nos. 00, 0, 1, 2, 4 and 6.





SWISS PATTERN

Square Files are square in section as the name indicates, tapering on all (One safe side when so ordered.)

(6) SQUARE

four sides to a fine point. Double cut on all four sides.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.

Warding Files are rectangular in section with thickness approximately

(7) WARDING

one-eighth of their width, tapering to a point in width and tapering slightly in thickness. Double cut on the two flat sides and single cut on both edges.

Made in lengths of 3, 4, 5, 6, 8 and 10 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.

Crochet Files are flat with two well-rounded edges. They taper in

(8) CROCHET

both width and thickness. Double cut on the flat sides and on both edges.

Made in lengths of 3, 4, 6, 8 and 10 inches and in cuts Nos. 00. 0, 1, 2, 3 and 4.

Knife Files are made from steel that is knife shaped, the included

(9) KNIFE

angle of the sharp edge being 10°, tapering in width and thickness to the point. Double cut on both flat sides and single cut on both edges.

Made in lengths of 3, 4, 5, 6 and 8 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.

Barrette Files are flat on one side. The backs are beveled at the edges as

(10) BARRETTE

indicated by the cross section. (The beveled back of the 3-inch length, however, is ground to a point.) The wide flat sides are double cut. Back and beveled edges are "safe" or uncut.

Made in lengths of 3, 4, 6 and 8 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.



ATTERN



(11) THREE SQUARE

Three Square Files are triangular in section with angles of 60°, tapering to

the point, corners left sharp. Double cut on the three sides and single cut on the edges.

Made in lengths of 3, 4, 5, 6, 8 and 10 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.

(12) METAL SAW

Metal Saw Files are the same in section as Three Square Files but are par-

allel throughout their length. Double cut on the three sides and single cut on the edges.

Made in lengths of 3, 4, 5, 6 and 8 inches and in cuts Nos. 0, 2 and 4.

(13) **CANT**

Cant Files are triangular as shown by cross sections, tapering to the

point in both width and thickness. Double cut on three sides and single cut on the two sharp edges.

Made in lengths of 4, 6 and 8 inches and in cuts Nos. 00, 0, 2 and 4.

(14) SLITTING

Slitting Files are made of double angular section, the included angle

between the sides being approximately 15°. Double cut on the four sides and single cut on the two sharp

Made in lengths of 4 and 6 inches and in cuts Nos. 00, 0, 2 and 4.



NICHOLSON X. F.

Round Straight Half Round Pippin Round Join

17

18

19

Half Round Files are half round in section,

(15) HALF ROUND

tapering in width and thickness to the point. Double cut on both flat and half round sides.

Made in lengths of 3, 4, 5, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

Round Files taper throughout their length to a fine point. Double cut.

(16) ROUND

Made in lengths of 3, 4, 5, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

Round Straight Files are made from the same sizes of steel as Round Files but are parallel

(17) ROUND STRAIGHT

Files but are parallel throughout their length. Double cut.

Made in lengths of 4, 5, 6 and 8 inches and in cuts Nos. 00, 0, 2 and 4.

Joint Files are parallel in width and thickness and are made with round or square edges, thick or

(18) **JOINT**

or square edges, thick or thin. Double cut on edges only. Sides are safe.

Made in lengths of 4 and 6 inches and in cuts Nos. 0 and 2.

Pippin Files, sometimes called "Apple Seed" Files, have rounded

(19) PIPPIN

backs which taper to a sharp edge. They also taper to a point in both width and thickness.

Made in lengths of 4, 6 and 8 inches and in cuts Nos. 00, 0, 1 2 and 4.

PATTERN FILES

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3½" Die Sinkers Files • Die Sinkers Files are designed for dressing dies of all kinds. Made in twelve shapes as illustrated, $3\frac{1}{2}$ " in length and in cuts Nos. 0, 1 and 2. In assorted sets they are supplied in orange and black plastic boxes. Box shown on back cover.

FLAT

AURIFORM

OVAL-1 Sharp Edge

OVAL

HALF ROUND

ROUND

KNIFE

FLAT—2 Round Edges (Crochet)

FLAT—1 Safe Edge

LOZENGE

SQUARE

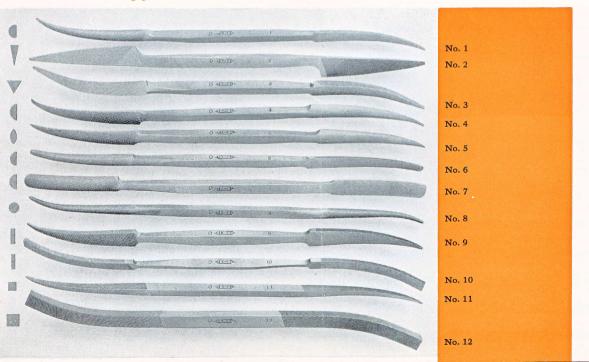
THREE SQUARE



31/2" Silversmiths Rifflers

 \bullet Silversmiths Rifflers are made in $7\frac{1}{2}$ " length only, in twelve shapes as illustrated and in cuts Nos. 0 and 2. May be purchased in assortments or in any quantity of each shape.

NOTE—Our X.F. line also includes Die Sinkers Rifflers in 6'', 61/2'' and 7'' lengths and in cuts Nos. 0, 2 and 4. Full details on request.





Round Handle Needle Files

• Round Handle Needle Files are used by jewelers, die makers, watch makers, and fine toolmakers. Also in every home workshop for precision filing. Knurled Handles assure a firm grip on file. Lengths: 4", 4¾", 5½" and 6¼". Cuts Nos. 0, 2, 4 and 6. Assorted sets of one dozen each supplied in orange and black plastic boxes. Box shown on back cover.

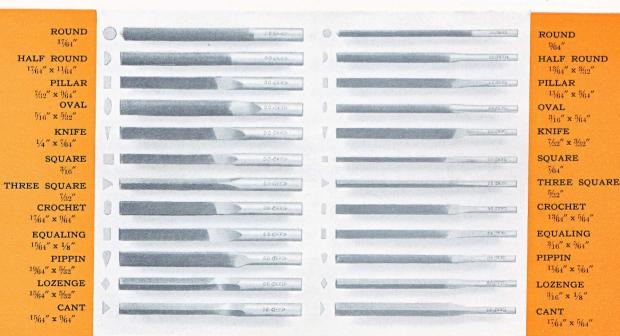




31/4" Bench Filing Machine Files

• Bench Filing Machine Files are designed to cut on downward stroke and are for use in machines for filing dies and patterns. They are $3\frac{1}{4}$ " overall and have $\frac{1}{4}$ " or $\frac{1}{8}$ " round shanks.

Made in 12 different shapes as illustrated. When purchased in assorted sets these files are supplied in orange and black plastic boxes shown on back cover. Made in cuts Nos. 00, 0 and 2.

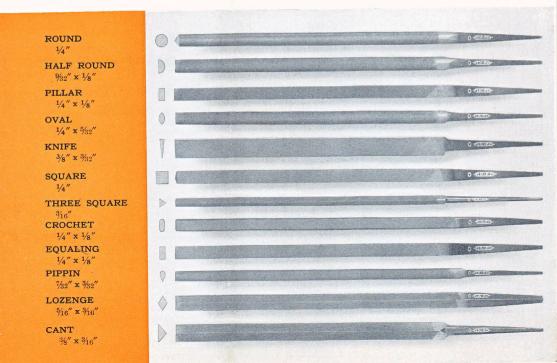




5" Parallel Machine Files

Parallel Machine Files are made for use in filing machines. Made in twelve different shapes as illustrated, 5" long exclusive of the

tang. Made in cuts Nos. 00, 0 and 2. Made to file on the upward stroke.





SPECIAL PARALLEL MACHINE FILES FOR THIEL, SIMPLEX, EXCEL AND INDEX TYPE FILING MACHINES



COMPRESSION TYPE



TENSION TYPE

Above files illustrate two of the more than 260 different sizes and shapes and cuts regularly carried in stock. Circular showing complete line on request.

8" PARALLEL MACHINE FILES FOR OLIVER, HARVEY, BUTTERFLY AND COCHRANE-BLY TYPE FILING MACHINES



These files have cuts for 6" of their lengths and have 2" Blunt Shanks. Made in a wide variety of shapes, sizes and cuts. Complete circular on request.